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a second section of said one slot is spread by a first short period code having a spreading factor [lower] smaller than a spreading factor of said long period code and a second short period code having a spreading factor equal to or [lower] smaller than the spreading factor of said long period code, and said matched filter despreads said control signal by using said first short period code.

Sub to 15
--15. A mobile terminal used in a code division multiple access mobile communication system, comprising:

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an RF unit for converting a received signal of a carrier frequency received from an antenna to a received signal of a baseband; and

a matched filter for despreading said received signal to provide a correlation value,

wherein said received signal includes a control signal, a first section of one slot of said control signal being spread by a long period spreading code assigned to said base station and spread by a first short period spreading code assigned to each channel of said base station, a second section of said one slot being spread by a second short period spreading code having a spreading factor lower than those of said long period spreading code and of said first short period spreading code and spread by a third short period spreading code having a spreading factor not higher than those of said long period spreading code and of said first short period spreading code, and

wherein said matched filter despreads said control signal by use of said second short period spreading code.

--16. A mobile terminal according to claim 15, wherein said second short period spreading code is a short period spreading code common to base stations included in the mobile communication system, said third short period spreading code has short period spreading codes corresponding to classification of said long period spreading code.

--17. a mobile terminal used in a code division multiple access mobile communication system, comprising:

a RF unit for converting a received signal of a carrier frequency received from an antenna to a received signal of a baseband; and

a matched filter for despreding said received signal to provide a correlation value,

wherein said received signal includes a control signal, a first section of one slot of said control signal being spread by a long period spreading code assigned to said base station and spread by a short period spreading code assigned to each channel of said base station, a second section of said one slot being spread by a predetermined short period spreading code, and

wherein a number of taps of said matched filter is smaller than numbers representing spreading factors of said long period spreading code and of said short period spreading code.

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--18. A mobile terminal comprising a matched filter having a number of stages, said number of stages of the matched filter being smaller than a number representing a symbol length of a control signal transmitted in a section other than a long code masked symbol section in one slot on a perch channel, said matched filter having coefficients kept set for constant values.

--19. A mobile terminal according to claim 18, wherein said number of stages of said matched filter is equal to a number representing a symbol length of a masked symbol in said long code masked symbol section.

--20. A mobile terminal according to claim 19, wherein said coefficients of the matched filter correspond to a common short code (CSC) in said long code masked symbol section.--

REMARKS

This is the second preliminary amendment filed in the above-identified application. Applicants request entry of new claims 15-20. As a result of the entry of the two Preliminary Amendments that have been filed, claims 12-20 are pending. Examination is respectfully requested.

Respectfully submitted

John R. Mattingly
John R. Mattingly
Registration No. 30,293

Mattingly, Stanger & Malur, P.C.
104 East Hume Avenue
Alexandria, Virginia 22301
(703) 684-1120
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